

14-8N-5360

Form PO-211 Sheet 2 (1-52) 50M

LOG OF WELL

SHEET No. 2

| District Casper - Dele | | Owner The Texas Company | | Farm Selma Stenbom | | Well No. #2 |
|------------------------|---------|-------------------------|-------|--------------------|-------------------|--|
| FORMATION | | AMOUNT | COLOR | HARD OR SOFT | DEPTH CORES TAKEN | REMARKS |
| Tertiary | Surface | 620 | | | | Gravels and alluvium of gray and pink quartz rounded pebbles. |
| Pierre Shale | 620 | 3162 | | | | Dark gray to black clay shale, few calcareous beds, soft and gummy, with stringers of limestone and fish scales in places. |
| Niobrara (Lime) | 3782 | 413 | | | | Shale, limey, black, brownish black looking where abundant forams giving speckled appearance with their tiny white spots. Some shale slightly silty. Also, plain and soft blue gray shale alternating. Bentonite, pyrite specks. |
| Carlisle Shale | 4195 | 175 | | | | Shale, sandy and silty shale, dark gray to black, sandy to very fine sandstone streaks gray peppered with black specks, calcareous soft. Also limestone stringers, light orange, silty soft, and bentonite. Shales are calcareous and in part white specked with forams, and few fish fragments. |
| Greenhorn (Limestone) | 4370 | 07 | | | | Limestone, brown, dense hard, cherty looking. Sandy limestone to very fine and limey sandstone hard, tight, and gray. |
| Graneros Shale | 4377 | 265 | | | | Shale, silty siltstone, black, much speckled with forams. Silty lime stringers. Plain shale dark gray, much calcareous. In lower portion few thin sandstone beds, gray very fine, speckled with glauconite and black specks. |
| Dakota Sandstone | 4642 | 47 | | | | Sandstone, very fine to fine and well sorted grains angular to sub-angular, light gray where barren, mostly noncalcareous, little or no cementation. |
| Base "B" | 4689 | 70 | | | | |
| "J" | 4759 | 53 | | | | |
| Schlumberger T.D. | 4812 | 76 | | | | |
| Driller's T.D. | 4888 | | | | | |

LOG OF WELL

SHEET No. 3District Casper - Dale Owner The Texas Company Farm Selma Stanbom Well No. #2

| FORMATION | AMOUNT | COLOR | HARD OR SOFT | DEPTH CORES TAKEN | REMARKS |
|--|--|-------|--------------|-------------------|--|
| <u>FORMATION ON TOP FROM SCHLUMBERGER ELECTRIC LOG</u> | | | | | |
| Tertiary | Surface | | | | |
| Pierre Shale | 620 | | | | |
| Niobrara | 3782 | | | | |
| Fort Hayes | 4093 | | | | |
| Carlisle Shale | 4195 | | | | |
| Greenhorn | 4370 | | | | |
| Graneros Shale | 4377 | | | | |
| Bentonite Marker | 4533 | | | | |
| Dakota Sandstone | | | | | |
| "jn" | 4642 | | | | |
| Base "jn" | 4689 | | | | |
| "jn" | 4759 | | | | |
| Schlumberger T.D. | 4812 | | | | |
| Driller's T.D. | 4888 | | | | |
| <u>DRILL STEM TESTS</u> | | | | | |
| DST #1 | September 1, 1952 | | | | |
| | Packer set 4643' to 4648' | | | | |
| | Tool open 1 Hour; Shut in 15 Minutes. | | | | |
| | Instant fair blow. Decreased at end. Gas in 31 minutes. | | | | |
| | Rec. 100' of Oil and Gas Cut Mud, 2000' of gasy oil, 800' of Hy. | | | | |
| | Oil & Gas Cut Water. | | | | |
| | IF - 825; FF - 1100; SI - 1250; HP - 2550. | | | | |
| DST #2 | September 2, 1952 | | | | |
| | Packer set 4767' to 4772' | | | | |
| | Misrun | | | | |
| DST #3 | September 3, 1952 | | | | |
| | Packer set 4768' to 4773' | | | | |
| | Tool open 1 Hour; Shut in 15 Minutes. | | | | |
| | Fair to weak blow, died in 5 minutes. Tool reset two more times. | | | | |
| | Rec. 118' of mud. | | | | |
| | IF - 0; FF - 0; SI - 1100; HP - 2500. | | | | |
| <u>CORE RECORD</u> | | | | | |
| Core No. 1, from 4640' to 4688' | | | | | Cut 48'; Rec. 48' |
| 4640.0 - 4642.0 | 2 | | | | sh, bl, rotten |
| 4642.0 - 4645.0 | 3 | | | | ss, gy, fn, soft, por, dirty, fair st & c, bleed |
| 4645.0 - 4645.5 | .5 | | | | coal & ss |

14-EN-5360

Form PO-211 Sheet 2 (1-52) 50M

LOG OF WELL

SHEET No. 4

| District | Casper - Dale | Owner | The Texas Company | Farm | Selma Stenham | Well No. |
|---|---------------|--------|-------------------|--------------|-------------------|--|
| | | | | | | #2 |
| FORMATION | | AMOUNT | COLOR | HARD OR SOFT | DEPTH CORES TAKEN | REMARKS |
| Core No. 1, from 4640' to 4688' (cont.) | | | | | | |
| 4645.5 - 4646.0 | | .5 | | | | ss, as above |
| 4646.0 - 4646.3 | | .3 | | | | sh, bl, hd |
| 4646.3 - 4655.5 | | 9.2 | | | | sh, bl, hd, ss, brn, fn por, friable, good st & odor, bleed, VF 49 & 50 sh 51.5 |
| 4655.5 - 4656.0 | | .5 | | | | sh, bl, hd. |
| 4656.0 - 4659.00 | | 3. | | | | silt & sh, lam, H & T |
| 4659.0 - 4660.8 | | 1.8 | | | | ss & sh, lam. carb. |
| 4660.8 - 4661.2 | | .4 | | | | coal |
| 4661.2 - 4662.0 | | .8 | | | | Lam ss & sh, H, T. & B |
| 4662.0 - 4662.4 | | .4 | | | | Lignit Sh |
| 4662.4 - 4665.0 | | 2.6 | | | | silt, gy, shaly, H, T & B |
| 4665.0 - 4679.0 | | 14. | | | | sh, silty, carb. |
| 4679.0 - 4680.0 | | 1. | | | | coal & sh |
| 4680.0 - 4685.5 | | 5.5 | | | | sh, dk gy, rotten |
| 4685.5 - 4686.0 | | .5 | | | | Mudstone, brn, dense |
| 4686.0 - 4688.0 | | 2. | | | | ss, gy, foss'l, fn, hd appears wet |
| Core No. 2, from 4760' to 4790' | | | | | | |
| Cut 30'; Rec. 30' | | | | | | |
| 4760.0 - 4762.0 | | 2. | | | | ss, gy, dirty, fn, por No 3t. or O., very sh hd |
| 4762.0 - 4767.0 | | 5. | | | | ss, gy, dirty, fn, sof por, no st or O, shaly fossil |
| 4767.0 - 4769.5 | | 2.5 | | | | ss, fn, gy, soft, irre. la sh, sl st & O. |
| 4769.5 - 4772.0 | | 2.5 | | | | ss, gy, fn, hd, clean, good st & O, bleed |
| 4772.0 - 4774.3 | | 2.3 | | | | ss, fn, gy, hd, irreg. sh lam |
| 4774.3 - 4775.5 | | 1.2 | | | | ss, fn, gy, clean, por appears wet |
| 4775.5 - 4778.5 | | 3. | | | | ss, as above w/sh lam. |
| 4778.5 - 4782.0 | | 3.5 | | | | ss, gy, hd, por, dirty irreg. sh lam, mica, glaucous. |

LOG OF WELL

SHEET No. 5District Casper - Dale Owner The Texas Company Farm Salma Steenbom Well No. #2

| FORMATION | AMOUNT | COLOR | HARD OR SOFT | DEPTH CORES TAKEN | REMARKS |
|--|--------|-------|--------------|-------------------|--|
| <u>Core No. 2, from 4740' to 4790' (cont.)</u> | | | | | |
| 4782.0 - 4783.0 | 1. | | | | ss, gy, hd, por, dirty, iron sh lam, ss./fn, clean, hd, tite, appears wet. |
| 4783.0 - 4784.0 | 1. | | | | coal |
| 4784.0 - 4785.0 | 1. | | | | silt, hd, gy, T. & Ber. shaley |
| 4785.0 - 4786.0 | 1. | | | | sh, bl, hd |
| 4786.0 - 4787.0 | 1. | | | | Bent, hd, gy-green |
| 4787.0 - 4788.0 | 1. | | | | sh, bl, hd |
| 4788.0 - 4790.0 | 2. | | | | silt, shaly, H T & B. carb, coal fissures. |
| <u>Core No. 3, from 4790' to 4820'</u> | | | | | |
| 4790.0 - 4792.5 | 2.5 | | | | ss & sh, inter lam, gy hd, tite, appears wet |
| 4792.5 - 4793.0 | .5 | | | | ss, gy, fn, clean, H&T appears wet |
| 4793.0 - 4802.5 | 9.5 | | | | ss & sh, lam, gy, H & T & B. |
| 4802.5 - 4805.2 | 2.7 | | | | sh, bl, hd |
| 4805.2 - 4808.0 | 2.8 | | | | sh, bl, hd, sandy, T & B |
| 4808.0 - 4810.0 | 2. | | | | sh, bl, hd |
| 4810.0 - 4815.0 | 5. | | | | sh, bl, hd, sandy, T&B |
| 4815.0 - 4820.0 | 5. | | | | ss, fn, gy, H&T, appears wet |
| <u>Core No. 4, from 4820' to 4868'</u> | | | | | |
| 4820.0 - 4825.0 | 5. | | | | ss, gy, fn, hd, fair por, V, no st or B, appears wet, mica. |
| 4825.0 - 4829.0 | 4. | | | | sh, med gy, silty, mica, hd |
| 4829.0 - 4832.0 | 3. | | | | sh, med gy, rotten |
| 4832.0 - 4834.3 | 2.3 | | | | sh, med gy, silty, hd, 3" bent on bottom. |
| 4834.0 - 4838.0 | 3.7 | | | | sh, bl, hd. |
| 4838.0 - 4839.0 | 1. | | | | sh, brn-gy, silty, hd. |

LOG OF WELL

SHEET No. 6District Casper - Dale Owner The Texas Company Farm Selma Stenbow Well No. #2

| FORMATION | AMOUNT | COLOR | HARD OR SOFT | DEPTH CORES TAKEN | REMARKS |
|--|--------|-------|--------------|-------------------|---|
| <u>Core No. 4, from 4820' to 4868' (cont.)</u> | | | | | |
| 4839.0 - 4843.0 | 4. | | | | sh, bl, silty, hd |
| 4843.0 - 4844.0 | 1. | | | | sh, brn gy, sandy |
| 4844.0 - 4846.0 | 2. | | | | silt, sandy, shaly, carb, sl por, s pores wet. |
| 4846.0 - 4855.0 | 9. | | | | ss, lt gy, dirty, carb fair por, appears wet, w/few sh streaks (1"), 15° dip. |
| 4855.0 - 4868.0 | 13. | | | | ss as above, less sh streaks, sh parting, very carb. |
| <u>Core No. 5, from 4868' to 4888'</u> | | | | | <u>Cut 20'; Rec. 20'</u> |
| 4868.0 - 4870.5 | 2.5 | | | | ss, soft, gy, wet, no St or C. |
| 4870.5 - 4872.5 | 2. | | | | sh, bl, w gy ss mott. |
| 4872.5 - 4873.5 | 1. | | | | sh, bl, ss streaks |
| 4873.5 - 4877.0 | 3.5 | | | | sh, bl, rotten |
| 4877.0 - 4879.0 | 2. | | | | sh, bl, w silt, hard |
| 4879.0 - 4882.0 | 3. | | | | sh, bl, rot, soft |
| 4882.0 - 4884.0 | 2. | | | | silt, gy, hd |
| 4884.0 - 4888.0 | 4. | | | | sh, bl, rotten |